



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,959	01/02/2001	Uwe Hansmann	DE9-1999-0077	9951
877	7590	02/25/2005	EXAMINER	
IBM CORPORATION, T.J. WATSON RESEARCH CENTER P.O. BOX 218 YORKTOWN HEIGHTS, NY 10598			KYLE, CHARLES R	
		ART UNIT	PAPER NUMBER	
		3624		

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<i>Office Action Summary</i>	Application No.	Applicant(s)
	09/752,959	HANSMANN ET AL.
Examiner	Art Unit	
Charles R Kyle	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 January 2001.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-14 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. They recite the phrase "...offering goods and/or services." It is unclear whether both goods and services are required limitations or only one element of the two. The metes and bounds of the claim are unclear.

Claims 3-5 recite the limitation "said authentication" in their first lines. There is insufficient antecedent basis for this limitation in the claim.

The Claims have been examined to the best of the Examiner's ability given the ambiguities.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673

(1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system

for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001), non-precedential but cited for its reasoning.

In the present application, Claim 12 has no connection to the technological arts. None of the steps recited indicate any connection to a computer or technology. The steps could be performed manually with only trivial involvement of a simple electronic device. The preamble recitation of a computer program product does not give life and breath to the body of the claim and is given little patentable weight. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts, such as incorporating a computer network or electronic network into the steps; for example: “receiving over a computer network”.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1-5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,029,150 *Kravitz*.

As to Claim 1, *Kravitz* discloses the invention as claimed, including in a method of payment in a purchasing action (Col. 12, lines 49-51) performed by means of an electronic communication device (Col. 11, lines 57-60) between a customer using said electronic communication device (Col. 12, lines 45-49) and a provider offering goods and/or services (Col. 12, lines 51-54), steps of:

building up a connection between said customer and said provider via a communication channel of said communication device (Col. 12, lines 45-51);

upon receipt of a purchase order from said customer (Col. 12, lines 49-51), issuance of an electronic bill by said provider and transmission of said electronic bill to said customer (Col. 12, lines 51-54);

upon acknowledgement of said electronic bill by said customer transmission of a money transfer order from said customer to a payment provider (Col. 12, lines 56-59; Col. 12, lines 15-22);

execution of said money transfer order by said payment provider by debiting an account of said customer (Col. 12, line 60 to Col. 13, line 12);

sending a receipt of payment to said customer and forwarding said receipt of payment to said provider (Col. 13, lines 13-26).

Concerning Claim 2, *Kravitz* discloses money transfer order execution after authorization of the customer at Col. 7, lines 19-45. See also Col. 29, line 19 to Col. 32, line 54 for details of authorization.

With respect to Claim 3, *Kravitz* discloses authentication by a communication provider via a service channel at Col. 12, line 55 to Col. 13 line 11 and Col. 29, lines 10-17.

With respect to Claim 4, *Kravitz* discloses authentication before transmission of a money transfer order at Col. 25, line 30 to Col. 27, line 23.

With respect to Claim 5, *Kravitz* discloses authentication after transmission of a money transfer order at Col. 29, line 18 to Col. 32, line 53.

With respect to Claim 8, *Kravitz* discloses the use of an Internet connection at Col. 11, lines 50-60.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,029,150 *Kravitz* in view of US 6,574,314 *Martino*.

With respect to Claim 6, see the discussion of Claim 1. *Martino* discloses use of a service (data) channel for transmission of transaction data from a data transaction server at Col. 23, lines 35-59. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the service channel of *Martino* to transmit the transaction data of *Kravitz* because this would transmit transactions data without using valuable voice channel bandwidth.

With respect to Claim 7, see the discussion of Claim 1. *Martino* discloses use of a voice channel at Col. 7, lines 30-43. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kravitz* to use a voice channel so as to perform simple verbal placement of payment instructions and follow on information.

With respect to Claim 10, *Kravitz* discloses the invention substantially as claimed. See the discussion of Claim 1. *Kravitz* does not disclose limitations relating to use of voice and service channels for transmission of the payment related documents. *Martino* discloses the use of two channels (Col. 7, lines 19-43) in a cellular system (Col. 3, lines 52-59) for transmission of payment related documents (Col. 23, lines 35-59). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kravitz* to use the two channel cellular implementation of *Martino* because this would provide a familiar payment device having the capability of simultaneously presenting data (on screen 20, Fig. 5A) and allowing voice communication (via handset 54, Fig. 5A), thus relieving a user from having to switch between channels for different types of information. See *Martino* at Col. 7, lines 30-43.

With respect to Claim 11, *Kravitz* does not specifically disclose authentication via a service channel. *Martino* discloses this limitation at Col. 20, line 56 to Col. 21, line 4 and Col. 7, lines 27-34. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify *Kravitz* to include the data channel authentication of *Martino* because this would provide transactions security without using valuable voice channel bandwidth

With respect to Claim 12, see the discussion of Claim 10 and *Kravitz* further discloses computer program product at Col. 13, line 65 to Col. Col. 17, line 67.

With respect to Claim 13, *Kravitz* discloses computer program product databases at Col. 13, line 65 to col. 17, line 67. Official Notice is taken that computer readable media are stored on computer readable media. Examples include cache, memory, fixed disks, and removable media. It would have been obvious to one of ordinary skill in the art at the time of the invention to use such media to store the computer program product databases to store important data.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,029,150 *Kravitz* in view of US 6,023,689 *Herlin et al.*

Kravitz discloses the invention substantially as claimed. See the discussion of Claim 1. *Kravitz* does not specifically disclose the use of a GSM communication device having an SIM. *Herlin* discloses this limitation in a mobile phone used for business applications at Background of the Invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kravitz* to use the mobile phone disclosed by *Herlin* because this would provide secure communication of business transaction data.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,029,150 *Kravitz* in view of US 6,574,314 *Martino* and further in view of EP 0 940 783 *Fitzgerald et al.*

Kravitz discloses the invention substantially as claimed. See the discussion of Claim 12.

Kravitz does not specifically disclose storage of program product on a cell phone chip.

Fitzgerald discloses this limitation at paras. 30 and 31. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kravitz* to use such a chip because this would make possible execution of program to perform payments processed by both *Kravitz* and *Fitzgerald*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kyle whose telephone number is (703) 305-4458. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

crk
February 11, 2005

Examiner Charles Kyle

